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Construction Products Division

TO:

J. W. Wolter

DATE:

August 13, 1985

FROM: W. J. McCaig

SUBJECT:

Verification of Discriminatory Fiber

Count

Attached is a letter from Mark Murphy which outlines differences in values reached for fiber exposure. The one difference which concerns me is in comparing NIOSH standard counts with our discriminatory procedure counts. Discriminating counts initially produced approximately one-half the value of the NIOSH standard method. This checked closely with what little electron microscope work MSHA has done. (Several years ago they picked up some counts over 2 f/cc. They would not issue a citation without mineral identification by electron microscope which reduced the values by about one-half). I understand Dr. Yang has also compared some work which gave similar results.

With this current set giving values of about 30%, I think it prudent that a confirmation by electron microscope be made. Libby values compare well with Cambridge counts so the method gives repeatable results. My concern is that we assure ourselves that our method doesn't drift continuously lower and actually understate exposures. Since the method we use is not the NIOSH standard, more validation will give added confidence to our measurements.

If you agree that additional or periodic confirmation is needed, I would like to suggest that Dr. Julie Yang should make the arrangements.

Attachment

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